I CLAIM:

1. A network-independent location-aware protocol for communicating with location-aware wireless mobile devices, the network-independent location-aware protocol stored as data bits in a pre-determined format on a computer readable medium, comprising:

5 comprising:

a location-aware management message for sending and receiving management messages to and from location-aware wireless mobile devices;

a location-aware event message for sending and receiving emergency or non-emergency event messages to and from location-aware wireless mobile devices; and

10 a location-aware commerce message for sending and receiving commerce messages to and from location-aware wireless mobile devices;

wherein the network-independent location-aware protocol messages can be simultaneously transmitted over a plurality of different types of wireless transport networks for a plurality of different types of location-aware mobile devices in a plurality

15 of different locations in a specific geographic area.

2. The network-independent location-aware protocol of Claim 1 wherein the location-aware management message includes a plurality of management message tags to request a location of a location-aware wireless mobile device, send a location identifier to

20 a location-aware wireless mobile device or send an acknowledgement to a location-aware wireless mobile device.

3. The network-independent location-aware protocol of Claim 1 wherein the

location-aware event message includes a plurality of event message tags for emergency or non-emergency event information generated for location-aware wireless mobile devices in a specific geographic area.

5   4.   The network-independent location-aware protocol of Claim 1 wherein the location-aware commerce message includes a plurality of commerce message tags for commercial information including electronic-commerce or mobile-commerce for location-aware wireless mobile devices in a specific geographic area.

10   5.   The network-independent location-aware protocol of Claim 1 wherein the network-independent location-aware protocol is also used for communicating with wired or non-mobile wireless devices.

         6.   A transport network location-aware interface for communicating with a
15   plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area, comprising:

         a first transport interface component for receiving network-independent location-aware protocol messages from an information repository on a wireless transport network, wherein the network-independent location-aware protocol messages are used to
20   communicate with a plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area;

         a second transport interface component for sending transport information from the wireless transport network via one or more wireless transport protocols in use on the

wireless transport network to the plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area, wherein the transport information includes one or more network-independent location-aware protocol messages used to communicate with a plurality of different types of location-

5   aware wireless mobile devices in a plurality of different locations in a specific geographic area.

7.   The transport network mobile user network message interface of Claim 6 wherein the transport information includes a plurality of data-bits, data frames or data

10   packets.

8. A mobile device location-aware interface for a location-aware wireless mobile device, comprising

a first location-aware interface component for receiving transport information on

15   a location-aware wireless mobile device from a wireless transport network via one or more wireless transport protocols in use on the wireless transport network, wherein the transport information includes one or more network-independent location-aware protocol messages used to communicate with a plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area;

20   a second location-aware interface component for generating device specific information on the location-aware wireless mobile device from the one or more network-independent location-aware protocol messages in the transport information.

9.   A method for providing network-independent location-aware protocol messages to location-aware mobile network devices, comprising:

accepting alert information from a plurality of information sources on an information repository, wherein the information repository is in communications with the

5   plurality of information sources via an information network, wherein the alert information is generated from emergency or non-emergency events, and wherein the alert information includes information emergency or non-emergency events for a specific geographic area;

formatting the accepted alert information into a network-independent location-

10   aware protocol message, wherein the network-independent location-aware protocol message can be sent to a plurality of different types of location-aware mobile wireless network devices in communications with the plurality of different types of transport networks via a plurality of uniform mobile user network message interfaces associated with the plurality of different types of transport networks;

15   optionally adding additional information to the network-independent location-aware protocol message based on the specific geographic area identified in the alert information,   wherein the additional information is dynamically generated from a plurality of databases associated with the information repository;

forwarding the network-independent location-aware protocol message to the

20   plurality of different types of transport networks in communications with the plurality of different types of location-aware mobile network devices located in the specific geographic area identified by the alert information, wherein the plurality of different types of transport networks forward the network-independent location-aware message to

the plurality of different types of location-aware mobile network devices located in the specific geographic area identified by the alert information via the plurality of uniform mobile user network message interfaces associated with the plurality of different types of transport networks.

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10. The method of Claim 9 further comprising a computer readable medium having stored therein instructions for causing a processor to execute the steps of the method.

10   11. The method of Claim 9 wherein the plurality of different types of transport networks include one or two-way paging, cellular telephone, personal communication services ("PCS"), global system for mobile communications, ("GSM"), "), Generic Packet Radio Services ("GPRS"), cellular digital packet data ("CDPD"), wireless application protocol ("WAP"), Bluetooth, 802.11b, or digital audio broadcasting

15   ("DAB"), transport networks.

12. The method of Claim 9 wherein the network-independent location-aware protocol message includes:

a location-aware management message for sending and receiving management

20   messages to and from location-aware wireless mobile devices;

a location-aware event message for sending and receiving emergency or non-emergency event messages to and from location-aware wireless mobile devices; and

a location-aware commerce message for sending and receiving commerce

messages to and from location-aware wireless mobile devices.

13. The method of Claim 12 wherein the location-aware commerce message includes electronic-commerce and mobile-commerce messages.

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14. The method of Claim 12 wherein the location-aware event messages include weather, traffic or E911, event messages.

15. The method of Claim 9 wherein the location-aware wireless mobile devices

10 include one or two way pagers, cellular phones, mobile phones, personal digital assistants, personal communication services ("PCS") devices, global system for mobile communications ("GSM") devices, "), Generic Packet Radio Services ("GPRS") devices, cellular digital Global Positioning System ("GPS") devices, Digital GPS ("DGPS") devices, Wireless Application Protocol ("WAP") devices, Bluetooth, 802.11b, or digital

15 audio broadcasting ("DAB") devices.

16. The method of Claim 9 wherein the optional additional information includes text, graphical maps, audio or video information.

20 17. The method of Claim 9 wherein the network-independent location-aware protocol messages are also used to communicate with wired or non-mobile wireless devices.

18. A method for locating and providing network-independent location-aware protocol messages to location-aware mobile network devices, comprising:

dynamically accepting location information from a plurality of different types of location-aware wireless mobile devices on an information repository when a location of a

5 location-aware wireless mobile device changes, wherein information repository is in communications with the plurality of different types of location-aware wireless mobile devices via a plurality of different types of transport networks;

accepting alert information from a plurality of information sources on an information repository, wherein the information repository is in communications with the

10 plurality of information sources via an information network, wherein the alert information is generated from emergency or non-emergency events, and wherein the alert information includes information emergency or non-emergency events for a specific geographic area;

formatting the accepted alert information into a network-independent location-

15 aware protocol message, wherein the network-independent location-aware protocol message can be sent to a plurality of different types of location-aware mobile wireless network devices in communications with the plurality of different types of transport networks via a plurality of uniform mobile user network message interfaces associated with the plurality of different types of transport networks;

20 optionally adding additional information to the network-independent location-aware protocol message based on the specific geographic area identified in the alert information, wherein the additional information is dynamically generated from a plurality of databases associated with the information repository;

determining whether any location-aware mobile network devices are currently located within the specific geographic area identified by the alert information using the accepted location information, and if so,

forwarding the network-independent location-aware protocol message to the plurality of different types of transport networks in communications with the plurality of different types of location-aware mobile network devices located in the specific geographic area identified by the alert information, wherein the plurality of different types of transport networks forward the network-independent location-aware message to the plurality of different types of location-aware mobile network devices located in the specific geographic area identified by the alert information via the plurality of uniform mobile user network message interfaces associated with the plurality of different types of transport networks.

19. The method of Claim 18 further comprising a computer readable medium having stored therein instructions for causing a processor to execute the steps of the method.

20. The method of Claim 18 further comprising:

determining whether any location-aware mobile network devices are currently located within the specific geographic area identified by the alert information using the accepted location information, and if not,

periodically checking the accepted location information to determine whether any location-aware mobile network devices are currently located within the

specific geographic area identified by the alert information using the accepted location information, and if so,

forwarding the network-independent location-aware protocol message to a specific transport network in communications with location-aware mobile network

5   devices now located in the specific geographic area identified by the alert information.

21.   The method of Claim 18 wherein the location information includes a longitude and latitude for a current geographic location.

10   22.   The method of Claim 18 wherein the plurality of different types of transport networks include one or two-way paging, cellular telephone, personal communication services ("PCS"), global system for mobile communications, ("GSM"), "), Generic Packet Radio Services ("GPRS"), cellular digital packet data ("CDPD"), wireless application protocol ("WAP"), Bluetooth, 802.11b, or digital audio broadcasting

15   ("DAB"), transport networks.

23.   The method of Claim 19 wherein the network-independent location-aware protocol message includes:

a location-aware management message for sending and receiving management

20   messages to and from location-aware wireless mobile devices;

a location-aware event message for sending and receiving emergency or non-emergency event messages to and from location-aware wireless mobile devices; and

a location-aware commerce message for sending and receiving commerce

messages to and from location-aware wireless mobile devices.

24.   The method of Claim 23 wherein the location-aware commerce message includes electronic-commerce and mobile-commerce messages.

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25. The method of Claim 23 wherein the location-aware event messages include weather, traffic or E911, event messages.

26.   The method of Claim 23 wherein the location-aware wireless mobile devices

10   include one or two way pagers, cellular phones, mobile phones, personal digital assistants, personal communication services ("PCS") devices, global system for mobile communications ("GSM") devices, "), Generic Packet Radio Services ("GPRS") devices, cellular digital Global Positioning System ("GPS") devices, Digital GPS ("DGPS") devices, Wireless Application Protocol ("WAP") devices Bluetooth, 802.11b, or digital

15   audio broadcasting ("DAB") devices.

27.   The method of Claim 23 wherein the optional additional information includes text, graphical maps, graphics, audio or video information.

20   28.   The method of Claim 23 wherein the network-independent location-aware protocol messages are also to communicate with wired or non-mobile wireless devices.

29. A location-aware network system comprising, in combination,

a network-independent location-aware protocol for communicating with location-aware wireless mobile devices stored as data bits in a pre-determined format on a computer readable medium, including:

5 a location-aware management message for sending and receiving management messages to and from location-aware wireless mobile devices,

a location-aware event message for sending and receiving emergency or non-emergency event messages to and from location-aware wireless mobile devices, and

a location-aware commerce message for sending and receiving commerce
10 messages to and from location-aware wireless mobile devices,

wherein the network-independent location-aware protocol messages can be simultaneously transmitted over a plurality of different types of wireless transport networks for a plurality of different types of wireless location-aware wireless mobile devices in a plurality of different locations in a specific geographic area;

15 a transport network location-aware interface for communicating with a plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area, including:

a first transport interface component for receiving network-independent location-aware protocol messages from an information repository on a wireless transport network,
20 wherein the network-independent location-aware protocol messages are used to communicate with a plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area,

a second transport interface component for sending transport information from the

wireless transport network via one or more wireless transport protocols in use on the wireless transport network to the plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area, wherein the transport information includes network-independent location-aware protocol

5   messages used to communicate with a plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area;

    a location-aware mobile device interface for a location-aware wireless mobile device, including:

    a first location-aware interface component for receiving transport information on

10   a location-aware wireless mobile device from a wireless transport network via one or more wireless transport protocols in use on the wireless transport network, wherein the transport information includes one or more network-independent location-aware protocol messages used to communicate with a plurality of different types of location-aware wireless mobile devices in a plurality of different locations in a specific geographic area,

15   a second location-aware interface component for generating device specific information on the location-aware wireless mobile device from the one or more network-independent location-aware protocol messages in the transport information;

    a location-aware network server for accepting alert information from a plurality of information sources on an information repository, wherein the information repository is

20   in communications with the plurality of information sources via an information network, wherein the alert information is generated from emergency or non-emergency events, and wherein the alert information includes information emergency or non-emergency events for a specific geographic area, formatting the accepted alert information into a network-

independent location-aware protocol message, wherein the network-independent location-aware protocol message can be sent to a plurality of different types of location-aware mobile wireless network devices in communications with the plurality of different types of transport networks via a plurality of uniform mobile user network message interfaces associated with the plurality of different types of transport networks, optionally adding additional information to the network-independent location-aware protocol message based on the specific geographic area identified in the alert information, wherein the additional information is dynamically generated from a plurality of databases associated with the information repository, and forwarding the network-independent location-aware protocol message to the plurality of different types of transport networks in communications with the plurality of different types of location-aware mobile network devices located in the specific geographic area identified by the alert information, wherein the plurality of different types of transport networks forward the network-independent location-aware protocol message to the plurality of different types of location-aware mobile network devices located in the specific geographic area identified by the alert information via the plurality of uniform mobile user network message interfaces associated with the plurality of different types of transport networks; and

a plurality of location-aware wireless mobile devices for accepting network-independent location-aware protocol messages.

30. The location-aware network system of Claim 29 wherein the location-aware network server further includes:

accepting dynamically location information from a plurality of different types of location-aware wireless mobile devices on an information repository when a location of a location-aware wireless mobile device changes, wherein information repository is in communications with the plurality of different types of location-aware wireless mobile devices via a plurality of different types of transport networks;

determining whether any location-aware mobile network devices are currently located within the specific geographic area identified by the alert information using the accepted location information, and if so,

forwarding the network-independent location-aware protocol message to the plurality of different types of transport networks in communications with the plurality of different types of location-aware mobile network devices located in the specific geographic area identified by the alert information.

31. The location-aware network system of Claim 29 wherein the location-aware network server further includes:

determining whether any location-aware mobile network devices are currently located within the specific geographic area identified by the alert information using the accepted location information, and if not,

periodically checking the accepted location information to determine whether any location-aware mobile network devices are currently located within the specific geographic area identified by the alert information using the accepted location

information, and if so,

forwarding the network-independent location-aware protocol message to a specific transport network in communications with location-aware mobile network devices now located in the specific geographic area identified by the alert information.

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